

The claims recite an implant comprising a telemetry device that: "...comprises a telemetry transmitter and a telemetry receiver..." (Amended claim 1, 11, and 12, underlining added for emphasis.)

The implant disclosed in Fryer does not comprise a telemetry receiver as claimed by Applicant. In contrast, the "receiver coil" cited by the Examiner is only designed to receive "energy" to "energize" a pressure detecting oscillator. (Fryer, col. 4, lines 26 to 30.) The only actual data telemetry device incorporated *into* the intracranial implant disclosed by Fryer is transmitted coil 24 which is designed to transmit the pressure measurement to an external receiving device. (Fryer, col. 4, lines 53 to 58.)

Accordingly, Fryer does not teach, disclose or even suggest an implant comprising "a telemetry transmitter" and a "telemetry receiver," as required in claims 1, 11, and 12, and therefore cannot anticipate the claims of the current invention.

Claims 2 to 4 and 7 to 9 are dependent on claim 1. As such, these claims are believed allowable only based upon claim 1.

The Examiner also rejected claims 1, 2, 4, and 8 to 12, without comment, under 35 U.S.C § 102 as anticipated by Hepp (U.S. Patent No. 4,172,459). Applicants respectfully traverse this rejection.

Applicants' claims also recite: "...wherein each of the telemetry transmitter and the telemetry receiver is provided with a separate one of the . . . energy storage means", (Amended claim 1, underlining added for emphasis), or "...wherein each of the telemetry transmitter and the telemetry receiver is connected to a separate one of the . . . energy storage devices." (Amended claims 11 and 12, underlining added for emphasis.)

The telemetry receiver and telemetry transmitter disclosed in the Hepp reference are connected in common to a single energy storage circuit. (Hepp, Figure 5 and col.8, lines 9 to 15.) Indeed, Hepp et al. repeatedly describe a "receiver", which includes both receiver and transmitter functions, which is powered from a single power storage circuit, writing:

As will be explained in detail later with respect to Fig. 5, the power storage circuit 66 provides power for energizing the power the elements of the receiver 12." (Hepp et al., col. 7, lines 33 to 36.)

Providing more detail, Hepp et al. further state that:

The transmitter 10 transmits from its primary coil 16 to the secondary coil 34a an RF signal component comprised of a train of amplitude modulated pulses.

Each signal of such train comprises a first or power pulse that is stored in the power storage circuit 66 to provide energization for the elements of the receiver 12. ... As a review of the schematic of FIG. 5 indicates, these negative and positive voltages energize the elements of the receiver 12 and are applied to various points throughout the receiver 12. (Hepp et al., col. 7, line 68 to col. 8 line 19.)

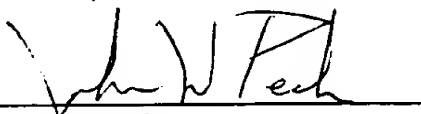
In light of these statements, a review of Figure 5 in the Hepp et al. reference, and particularly of components 66 and 74 thereof, shows that the receiver coil "34a" and the transmitter coil "34b" are connected together to a common ground, and derive power from the same "-V" and "+V" outputs from the same power source "66". Accordingly, Hepp does not teach, disclose or even suggest an implant comprising a telemetry device "...wherein each of the telemetry transmitter and the telemetry receiver is provided with a separate one of the at least two energy storage means", as required in claim 1, or "...wherein each of the telemetry transmitter and the telemetry receiver is connected to a separate one of the ... energy storage devices", as required in claims 11 and 12, and therefore cannot anticipate the claims of the current invention.

Claims 2, 4, 8 and 9 are dependent on claim 1. As such, these claims are believed allowable based upon claim 1.

In view of the foregoing amendments and remarks, consideration and allowance of this application are respectfully requested.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

1           1.       (Amended) An electromedical implant capable of exchanging data with an  
2 external apparatus, the implant comprising a telemetry device for the exchange of data with  
3 ~~[such] the~~ external apparatus and at least two energy storage means, wherein the telemetry  
4 device comprises a ~~[transmitting device]~~ telemetry transmitter and a ~~[receiving device]~~  
5 telemetry receiver, and wherein each of the ~~[transmitting device]~~ telemetry transmitter and  
6 the ~~[receiving device]~~ telemetry receiver is provided with a separate one of the at least two  
7 energy storage means.

1           2.       (Amended) The implant as set forth in claim 1 wherein each of ~~[the]~~ the energy  
2 storage means ~~[comprise]~~ comprises a buffer capacitor, and wherein each of the energy storage  
3 means is designed to charge up said buffer capacitor.

1           3.       (Amended) The implant as set forth in claim 2 wherein the buffer capacitor ~~[in]~~  
2 for the energy storage means for the ~~[transmitting device]~~ telemetry transmitter and the  
3 buffer capacitor for the energy storage means for the ~~[receiving device]~~ telemetry receiver are  
4 of different sizes.

1           5.       (Amended) The implant as set forth in claim 2 wherein the buffer capacitor for  
2 the energy storage means for the ~~[transmitting device]~~ telemetry transmitter is charged up  
3 immediately prior to a transmission procedure and the buffer capacitor for the energy storage  
4 means for the ~~[receiving device]~~ telemetry receiver is charged up immediately prior to a  
5 reception procedure.

1           6.       (Amended) The implant as set forth in claim 1 wherein the energy storage  
2 means for the ~~[transmitting device]~~ telemetry transmitter is further connected to the  
3 telemetry receiver such that said energy storage means for the telemetry transmitter further  
4 operates ~~[serves]~~ as a reserve energy storage means for the ~~[receiving device]~~ telemetry  
5 receiver.

1           7.       (Amended) The implant as set forth in claim 1 wherein the energy storage  
2 means for the ~~[receiving device]~~ telemetry receiver is further connected to the telemetry  
3 transmitter such that said energy storage means for the telemetry receiver further operates  
4 ~~[serves]~~ as a reserve energy storage means for the ~~[transmitting device]~~ telemetry transmitter.

1           8.       (Amended) The implant as set forth in claim 1 wherein the energy storage  
2 means for the ~~[receiving device]~~ telemetry receiver and the energy storage means for the  
3 ~~[transmitting device]~~ telemetry transmitter are ~~[designed to be]~~ connected either in parallel  
4 or in series with each other.

1           10.      (Amended) The implant as set forth in claim 1 wherein the electromedical  
2 device is selected from the group consisting of: a cardiac ~~[pacemakers]~~ pacemaker,  
3 ~~[defibrillators]~~ a defibrillator, and ~~[cardioverters]~~ a cardioverter.

1           11.      (Amended) A cardiac pacemaker implant capable of exchanging data with an  
2 external apparatus comprising a telemetry device and a plurality of energy storage devices,  
3 wherein the telemetry device comprises a ~~[transmitting device]~~ telemetry transmitter and a  
4 ~~[receiving device]~~ telemetry receiver, wherein each of the ~~[transmitting device]~~ telemetry  
5 transmitter and the ~~[receiving device]~~ telemetry receiver is connected to a separate one of the  
6 energy storage devices ~~[device]~~.

1           12.      (Amended) An electromedical implant capable of exchanging data with an  
2 external apparatus, the implant comprising a telemetry device for the exchange of data with  
3 such external apparatus and at least two energy storage devices, wherein the telemetry device  
4 comprises a ~~[transmitting device]~~ telemetry transmitter and a ~~[receiving device]~~ telemetry  
5 receiver, and wherein each of the ~~[transmitting device]~~ telemetry transmitter and the  
6 ~~[receiving device]~~ telemetry receiver is ~~[provided with]~~ connected to a separate one of the at  
7 least two energy storage devices.